SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS
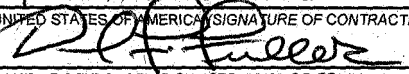## OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30

1. REQUISITION NUMBER: PR-HQ-09-01882		

2. CONTRACT NO. GS-35F4797H	3. AWARD/EFFECTIVE DATE 05/01/09	4. ORDER NUMBER 1519	5. SOLICITATION NUMBER DC0700306	6. SOLICITATION ISSUE DATE

7. FOR SOLICITATION INFORMATION CALL: ▶	a. NAME		b. TELEPHONE NUMBER (No collect calls)	8. OFFER DUE DATE/ LOCAL TIME

9. ISSUED BY CODE

Environmental Protection Agency
Information Resources Management Service Center (3803R)
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

10. THIS ACQUISITION IS

[X] UNRESTRICTED

[] SET ASIDE: _____ % FOR
[] SMALL BUSINESS
[] SMALL DISADV. BUSINESS
[] 8(A)

NAICS: **541519**
SIZE STANDARD:

11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED
[] SEE SCHEDULE

12. DISCOUNT TERMS

[ ] 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)

13b. RATING

14. METHOD OF SOLICITATION
[] RFQ   [] IFB   [X] RFP

15. DELIVER TO CODE

U.S. EPA
Attn: Melissa Benton (MC 8102R)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460,

16. ADMINISTERED BY CODE

See Box 9

17a. CONTRACTOR/ OFFEROR CODE _____ FACILITY CODE _____

CGI FEDERAL INC
12601 FAIR LAKES CIRCLE

Fairfax, VA 22033

18a. PAYMENT WILL BE MADE BY CODE

U.S. Environmental Protection Agency
RTP-Finance Center (D143-02)
109 T.W. Alexander Drive
Durham, NC 27711

[] 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER

18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a. UNLESS BLOCK BELOW IS CHECKED
[] SEE ADDENDUM

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	The Contractor shall provide Software Testing, Implementation, & Production Support (STIPS) under the Software Engineering and Specialized Scientific Support (SES3) Blanket Purchase Agreement # EP08H000777 .				
0001	Base Period: POP: 05/01/09 - 04/30/2010 Labor Hours NTE 28,932 Ceiling NTE: $2,780,098.96	1	JOB		$2,780,098.96
0002	Option Period I: POP: 05/01/10 - 04/30/2011 Labor Hours NTE 28,932 Ceiling NTE: $2,889,966.04	1	JOB		$2,889,966.04
0003	Option Period II: POP: 05/01/11 - 04/30/2012 Labor Hours NTE 28,932 Ceiling NTE: $3,004,193.00	1	JOB		$3,004,193.00
0004	Option Period III: POP: 05/01/12 - 04/30/2013 Labor Hours NTE 28,932 Ceiling NTE: $3,123,005.96	1	JOB		$3,123,005.96
0005	Option IV: POP: 05/01/13 - 04/30/2014 Labor Hours NTE 28,932 Ceiling NTE: $3,246,593.12	1	JOB		$3,246,593.12
0006	Option Period V: POP: 05/01/14 - 04/30/2015 Labor Hours NTE 28,932 Ceiling NTE: $3,375,146.60	1	JOB		$3,375,146.60

(Attach Additional sheets as Necessary)

25. ACCOUNTING AND APPROPRIATION DATA
See attached Accounting and Appropriation data.

26. TOTAL AWARD AMOUNT (For Govt. Use Only)
$18,419,003.68

[] 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4. FAR 52.212-3 AND 52.212-5 ARE ATTACHED. [] ARE [] ARE NOT ATTACHED.

[] 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA [] ARE [] ARE NOT ATTACHED.

28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN _____ COPIES
[] TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.

29. AWARD OF CONTRACT: REFERENCE _____ OFFER
[] DATED _____ . YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:

30a. SIGNATURE OF OFFEROR/CONTRACTOR	31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)

30b. NAME AND TITLE OF SIGNER (TYPE OR PRINT)	30c. DATE SIGNED	31b. NAME OF CONTRACTING OFFICER (TYPE OR PRINT) **DAVID F. FULLER**	31c. DATE SIGNED 4/27/09

AUTHORIZED FOR LOCAL REPRODUCTION

SEE REVERSE FOR OMB CONTROL NUMBER AND PAPERWORK BURDEN STATEMENT

STANDARD FORM 1449 (10-95)
Prescribed by GSA - FAR (48 CFR) 53.212

Software Testing, Implementation, and Production Support (STIPS-2)

Contract: GS-35F4797H, Task Order: 1519   Lead PR Number: PR-HQ-09-11882

Summary Information

Title: Software Testing, Implementation, and Production Support (STIPS-2)

Period of Performance: From: 05/01/09
                               To: 04/30/15
Award Date: 04/27/09
Total Funding: $1,704,394.32

Accounting/Appropriation Data

POP	DCN	BFYS	Appr.#	Org	Program Element	Site/ Project	Cost Org	Obj Clss	Amount	P/C
Opt 1	7AC900	08	C	267A000	404FB2APV	00000000		2504	$300,000.00	C
Opt 1	7AC900	09	C	267A000	203FA7A	LEFM0000		2512	$125,000.00	C
Opt 1	7AC900	09	C	267A000	203FA7A	LSYM0000		2512	$120,000.00	C
Opt 1	7AC900	09	C	267A000	106FHAA	LEFMSC00		2512	$20,000.00	C
Opt 1	7AC900	09	C	267A000	106FHAA	LSYMSC00		2512	$10,000.00	C
Opt 1	7AC900	09	C	267A000	106FHAA	00000000		2504	$10,000.00	C
Opt 1	7AC900	09	C	267A000	106FHAA	LPEMSC00		2512	$10,000.00	C
Opt 1	7AC900	09	C	267A000	203FC1A	LPEM0000		2512	$240,000.00	C
Opt 1	7AC900	09	C	267A000	404FB2APW	LSMM0000		2512	$255,000.00	C
Opt 1	7AC900	09	C	267A000	404F72APC	LSMM0000		2512	$100,000.00	C
Opt 1	7AC900	09	C	267A000	404F84A	00000000		2504	$86,000.00	C
Opt 1	7AC900	09	C	267A000	303FB3A	LEFD0000		2512	$45,000.00	C
Opt 1	7AC900	09	C	267A000	404F72A	00000000		2504	$25,000.00	C
Opt 1	XQ8W11	09	C	26XQ000	404FB2APW	LSMM0000		2515	$16,000.00	C
Opt 1	XN4438	08	C	26XN000	203FC1A	LSLMIABS		2515	$1,226.49	C
Opt 1	XN4438	08	C	26XN000	404FA8A	LSLMIABS		2515	$7,173.91	C
Opt 1	XN4438	08	C	26XN000	404FB2APW	LSLMIABS		2515	$93.92	C
Opt 1	XN4438	08	C	26XN000	404FB5A	LSLMIABS		2515	$100.00	C
Opt 1	XN4438	09	C	26XN000	404FB2APW	LSLMIABS		2515	$36,000.00	C
Opt 1	XN4438	09	C	26XN000	404FA8A	LSLMIABS		2515	$4,500.00	C
Opt 1	XN4438	09	C	26XN000	203FC1A	LSLMIABS		2515	$4,500.00	C
Opt 1	XMVK04	08	CR	26XMX35	404FB5A	LSLMIABS		2515	$4,800.00	C
Opt 1	X9E008	09	C	26XF000	404FB1A	LSMM0000		2515	$30,000.00	C
Opt 1	X9E008	09	C	26XF000	404F72APC	LSMM0000		2515	$75,000.00	C
Opt 1	X9E008	09	C	26XF000	404FB5A	LSMM0000		2515	$50,000.00	C
Opt 1	X9E008	09	C	26XF000	106FHAA	LSMM0000		2515	$25,000.00	C
Opt 1	X9E008	09	C	26XF000	404FA6A	LSMM0000		2515	$75,000.00	C
Opt 1	UUL511	09	C	26UU000	106FHAA	LSMM0000		2512	$9,000.00	C
Opt 1	UUL511	09	C	26UU000	404FB2APW	LSMM0000		2512	$20,000.00	C

Funding Breakout

Acct.Info	Funding Category	Amount
FY2008 - 7AC900	Cost Ceiling	$300,000.00
	Total:	$300,000.00
FY2008 - XMVK04	Cost Ceiling	$4,800.00
	Total:	$4,800.00
FY2008 - XN4438	Cost Ceiling	$8,594.32
	Total:	$8,594.32
FY2009 - 7AC900	Cost Ceiling	$1,046,000.00
	Total:	$1,046,000.00

```
FY2009 - UUL511 Cost Ceiling                        $29,000.00
----------------------------------------------------------------
                     Total:                         $29,000.00

FY2009 - X9E008 Cost Ceiling                       $255,000.00
----------------------------------------------------------------
                     Total:                        $255,000.00

FY2009 - XN4438 Cost Ceiling                        $45,000.00
----------------------------------------------------------------
                     Total:                         $45,000.00

FY2009 - XQ8W11 Cost Ceiling                        $16,000.00
----------------------------------------------------------------
                     Total:                         $16,000.00
```

Procurement Management Roles

TASK ORDER PROJECT OFFICER:

U.S. E.P.A.
Attn: MELISSA W. BENTON
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC   20460

Mail Code: 8102R
Phone Number: 202-564-2293
Fax Number: 202-565-2924
E-Mail Address: benton.melissa@epa.gov

ALTERNATE TASK ORDER PROJECT OFFICER:

U.S. E.P.A.
Attn: VALERIE A. BRANDON
1200 PENNSYLVANIA AVE, NW
WASHINGTON, DC   20460

Mail Code: 8102R
Phone Number: 202-564-3541
Fax Number: 202-565-2924
E-Mail Address: brandon.valerie@epa.gov

Cost/Price Schedule

CLIN#	POP	Item Description	Hours	Total
0002C	Base	Ceiling	28,932	$2,780,098.96
0003C	Opt 1	Ceiling	28,932	$2,889,966.04
0004C	Opt 2	Ceiling	28,932	$3,004,193.00
0005C	Opt 3	Ceiling	28,932	$3,123,005.96
0006C	Opt 4	Ceiling	28,932	$3,246,593.12
0007C	Opt 5	Ceiling	28,932	$3,375,146.60

Attachments

```
Attachment Name
---------------------------------------------------------------------
Statement of Work
Task Order Terms and Conditions
Appendix:  Deliverables
Appendix:  Glossary
SES3 Contractor Staff Report Template
Current Application Portfolio
```

Task Order Totals

Category	POP	Hours	Amount
Cost Ceiling	Base	28,932	$2,780,098.96
Cost Ceiling	Option 1	28,932	$2,889,966.04
Cost Ceiling	Option 2	28,932	$3,004,193.00
Cost Ceiling	Option 3	28,932	$3,123,005.96
Cost Ceiling	Option 4	28,932	$3,246,593.12
Cost Ceiling	Option 5	28,932	$3,375,146.60

Statement of Work

Appendix: Deliverables

SES3 Contractor Staff Report Template

SOFTWARE TESTING, IMPLEMENTATION, & PRODUCTION SUPPORT
(Scientific Management and Administrative Systems Operations and Maintenance)

INTRODUCTION

The **Software Testing, Implementation, & Production Support (STIPS)** Task Order Performance Work Statement is designed to ensure the Environmental Protection Agency (EPA), Office of Research and Development (ORD) is provided software testing, implementation, and production support for various ORD labs, centers, and offices for (1) science management systems / software and (2) administrative systems / software.

Science systems and science management systems are differentiated based on the data they house. A science system houses science research data and is typically used for performing scientific research (e.g. remote sensing data collections for air quality modeling) and is not within scope of this TO.

A science management system is typically a collection of information about a research product(s) resulting from a research project (e.g. air quality modeling). Science management systems software / databases are within scope of this TO.

Administrative data in support of science may include a tracking system for reserving a boat in Gulf Breeze or a Freezer Inventory application in Narragansett or Cincinnati. Administrative data may also include applications for management reporting and decision support. [1]

BACKGROUND

Historically, operations and maintenance support has included:
- Database maintenance – Table maintenance, minor software program enhancement, data migration, data conversion, data importing and exporting, data archival and restore
- Data exchange – Data compression and decompression, data encryption and decryption, data transfer through such vehicles as FTP and LEI (Notes Pump), data translation between databases and various formats such as spreadsheets and word processing tables
- Database administration – Monitoring, tuning, maintenance of user IDs and privileges, data security
- Ad hoc reports – Graphs, charts, tables, and queries constructed for users with tools such as Oracle Browser, SQL, Oracle Discoverer, Business Objects, Microsoft Access, and Lotus Approach
- Web interface – Cold Fusion searching, Web-to-database queries, applications employing a Web interface, such as Lotus Notes
- Acceptance testing for new applications and upgrades to existing applications
- Technical system documentation, test plans, and user guides (draft and final versions)
- Periodic demonstrations of modified system modules.
- Providing statistics concerning the use of the various Portals (e.g. Science Inventory) and web sites

SES[3] Environment for Software Testing, Implementation, & Production Support (STIPS)

---

[1] Synergies may exist between science, science management, and administrative data / systems in terms of the underlying technologies, solutions, interfaces, functions that ORD may wish to leverage in the future.

Under the STIPS Task Order, ORD has identified process and service-delivery improvements goals that require collaboration with the Contractor that will affect positive and timely change. These include:

- Documentation and implementation of enterprise-wide, functionally aligned processes and practices
- Regular review of processes and procedures to ensure that they remain relevant, measurable, and unencumbered
- Develop a full partnership relationship with the Vendor that will result in high quality software testing, implementation, & production support
- Apply CMMI level 3 requirements
- Implement industry best practices to reduce the time required to deliver new solutions and to strengthen service delivery.

PURPOSE AND SCOPE:

The tasks required under this PWS include non-development phases of the Life Cycle Management Framework. Support for STIPS shall adhere to the Agency's System Lifecycle Policy and software maintenance best practices. Current systems within scope are provided in an attachment. Additional systems may be added to those already identified throughout the life of the task order.

Maintenance is defined as making minor changes to systems, usually in response to defects found in the system or urgent new requirements. Maintenance projects typically meet the following criteria:

- Minor updates to a current system are necessary to fulfill an existing mission need;
- Changes or updates are necessary for a legacy system to remain effective and efficient;
- There is little or no change to the system's functional requirements;
- Work is of low risk;
- Patches or tweaking of existing technology is necessary; and/or
- Work requires a total level of effort of less than 240 hours.

Work requests **greater** than 240 for a single system or project for maintenance activities are not within scope of this TO.

By definition, *New Development* is when:

- A new system is required based on a new mission need;
- Several legacy systems are consolidated into a single system;
- A significant change or addition to the system's functional requirements (50% or greater as determined by EPA) is necessary;
- Work is of a medium to high risk[2];
- Technology new to EPA is introduced into a system;
- Proposed system upgrades will require more than one year to implement.

Modification / Enhancement is a type of development that makes changes to an existing system. Modification/Enhancement projects typically meet the following characteristics:

- Updates to a current system are necessary to fulfill an existing mission need;

---

[2] Risk factors may include mission criticality, visibility, complexity, technology, dollar value, and schedule.

- Several maintenance projects are combined to keep a legacy system effective and efficient;
- Minimal change or addition to a system's functional requirements (49% or less as determined by EPA) is necessary;
- Work is of low to medium risk;
- Upgrades to existing technology are necessary; and/or
- Work requires a greater level of effort than *maintenance*;
- Generally 4 to 12 months to implement (rule of thumb).

Work requests for modification/enhancements shall at minimum not exceed 4 months duration from when work begins, including estimation, through implementation in production. EPA will determine when modification/enhancement tickets are not within scope of STIPS due to the level of effort required. A modification/enhancement request by definition may include multiple ticket types that collectively equal a release. Other variables will be considered in determining whether work is within scope of STIPS including release schedule, available funding, priority.

> **NOTE:** The contractor is responsible for providing a separate DEVELOPMENT and TEST environment that conforms to the EPA and ORD production environment at all times. These environments will not be furnished by ORD. It is the contractor's responsibility to maintain their environments in synch with ORD's production environment in order to perform required work.

Task Order REQUIREMENTS

1.1. *Task Order Management Task*

Subtask 1-A. Progress Reporting
Subtask 1-B. Financial reporting and cost tracking
Subtask 1-C. Task Order Management Plan
Subtask 1-D. Work request handling and tracking
Subtask 1-E. Operations and Maintenance Plan
Subtask 1-F. Operating and Maintenance Manuals
Subtask 1-G. Project History Documents
Subtask 1-H. STIPS Document Repository
Subtask 1-I. SES3 Contractor Staff Report

Subtask 1-A. Progress Reporting

The contractor shall provide progress reporting that monitors performance and finances associated with this task order. In situations when a Contractor is awarded multiple Task Orders, the Technical Progress Report shall address each active Task Order separately, give a general outline of the effort, state the percentage of work completed for the Task Order during the reporting period, and relate it to the overall effort. Progress reporting may be requested to be broken down by the TDD, site, and Lab Center Office (L/C/O) level. ORD reserves the right to provide the format and elements the Progress Report will include. At minimum, the following:

(a) The Contractor shall furnish three (3) copies of the combined monthly technical and financial progress report stating the progress made, including the percentage of the

project completed, and a description of the work accomplished to support the price. Include the estimated percentage of task completed during the reporting period for each task order. The contractor shall include the next month anticipated/planned activities in the current month progress report with a crosswalk between what was "planned next month activities" to "actual next month activities."

(b) Specific discussions shall include difficulties encountered and remedial action taken during the reporting period, and anticipated activity with a schedule of deliverables for the subsequent reporting period.

(c) The Contractor shall provide a list of outstanding actions awaiting Contracting Officer authorization.

(d) The report shall specify financial status at the task order level as follows:

(1) For the current reporting period, display the amount claimed.

(2) For the cumulative period and the cumulative task order life display: the amount obligated, amount originally invoiced, amount paid, amount suspended, amount disallowed, and remaining approved amount. The remaining approved amount is defined as the total obligated amount, less the total amount originally invoiced, plus total amount disallowed.

(3) For labor hours:

- A list of employees, their labor categories, and the numbers of hours worked for the reporting period.
- For the current reporting period, display the expended direct labor hours, and the total loaded direct labor costs.
- For the cumulative task order period display: the negotiated and expended direct labor hours and the total loaded direct labor costs.
- Display the estimated direct labor hours and costs to be expended during the next reporting period.
- Display the current dollar obligated to the task order, net amount invoiced, and remaining amounts for the following categories: Direct labor hours, total estimated cost, subcontracts by individual subcontractor, travel, program management, and Other Direct Costs (ODCs).
- Unbilled allowable costs (e.g. subcontractor hours). Display the total costs incurred but unbilled for the current reporting period and cumulative for the task order.
- For the cumulative period display: amount shown on each TDD; amount currently claimed; and remaining approved amount. The remaining approved amount is defined as: the TDD amount less total amounts originally incurred.
- Display the estimates of remaining direct labor hours and costs required to complete the task order.
- Provide a graph using a vertical axis for dollars and a horizontal axis for expenditures against the total estimated cost of the Task Order.
- A list of deliverables and/or activities performed for each task order during the reporting period.

- A status listing of all approved/unapproved/pending approval requests received by the contractor during that month with associated status disposition and all requests pending completion on current and any previous monthly report with projected completion date. The numbers of hours required to complete each request shall be provided and any deviations from projected completion date shall be quantified and described.

Subtask 1-B. Financial Reporting and Cost Tracking: In addition to standard Task Order reporting requirements, ORD requires a mechanism for providing costs and estimates at the TDD or project/work request level with the capability to track costs to the type of work performed as it relates to this Task Order. All costs associated with projects and/or work requests shall be reported in the monthly report by TDD as well as at an aggregate level, and as specified by the individual Task Order TDDs. All costs associated with specific project codes shall be reported in the monthly report, and as specified in the individual work request.

- Project codes shall be established before technical work begins. Work estimates shall include costs associated with each major project milestone/phase.
- All cost-tracking for work to be billed should include information to identify the following:
  A. Task Order Number
  B. TDD Number
  C. Task number
  D. Application name
  E. Release number, if applicable
  F. SLCM Phase / Integration matrix[3]
  G. Work type (Bug fix, emergency release, etc.)
  H. Special project code specified in the TDD or documented in the WRS.

- Create financial reports and track costs at a detailed level and produce standard reports as well as ad hoc reports;
- Changes in established project codes must be reviewed by the Requestor, and approved by the TOCOR.
- Costs shall be included in the monthly financial report due by the 15th of the month following the month reported.
- Additional financial reporting requirements will be specified in the individual work request/technical direction document.
- Reports shall be accurate, clear, complete, timely and in accordance with the requirements in the work request. Information in the monthly progress reports shall be consistent with costs identified in the associated monthly invoice and consistent with generally accepted accounting principles.

Subtask 1-C. Task Order Management Plan

The contractor shall prepare a Task Order Management Plan describing the technical and functional (i.e. NOT site based) approach, organizational resources and management controls employed to meet the cost, performance and schedule requirements throughout Task Order execution. The contractor shall employ a program management structure to ensure the efficient execution of all tasks/TDDS, and the capability to report on the status of work performed. The contractor shall use a single point of contact (POC) for all matters regarding project administration and reporting. Work shall be reported in a format descriptive with an appropriate level of narrative and financial information for the TDD Technical Monitor and

---

[3] http://www.epa.gov/irmpoli8/ciopolicy/SLCMProcedures-2111.5-p-1.pdf page 8 of 94

shall also be reformatted and rolled up to an appropriate level suitable for the TOCOR and BPA Contracting Officer's Representative.

Subtask 1-D. Work request handling and tracking: The Contractor shall provide EPA customers with a centralized method of requesting project management support, including work status, at no cost to the government. The appropriate TOCOR/TM shall have access to this system for the purposes of tracking status, approval, and cost. The phrase "work request system" refers to a standard solution. The WRS will interface with the SES3 Work Request Interface Page of of ORD@Work. The WRS provides detailed work descriptions and routing approvals for requests associated with the applicable TO. The work requests will be routed to the appropriate TOCOR/TM for review, and approved requests will then be routed to the Contractor. The Contractor shall provide a written estimate of the number of hours necessary to complete the work. Work shall not start until approved by the TOCOR/TM. When ad hoc plans or reports are required, a request will be submitted via the WRS. The date of delivery for such items will be specified at time of the request. EPA standard operating procedures may require a technical work plan be submitted to the TOCOR/TM within a specified timeframe that contains specific deliverables and due dates for submission to the TOCOR/TM. When eighty-five percent (85%) of the ceiling hours have been expended on any Work Request issued with a ceiling of forty (40) hours or more, the TOCOR/TM as designated in the TDD shall be notified by the contractor in writing via the same WRS. If additional hours are necessary, contractor shall provide TOCOR/TM with an estimate to complete the work request. If the request for additional hours exceeds 15% of the original estimate, the request should include a description of changes to the original estimate and why hours beyond the original estimate are needed to complete the work outlined in that estimate. The TOCOR/TM shall approve or disapprove the requests and/or additional hours as appropriate.

Subtask 1-E. Operations and Maintenance Plan
The contractor shall update the current Operations & Maintenance (O&M) Plan that describes resources, roles, responsibilities, policies, processes and general procedures to effectively manage this life cycle function across ORD. O&M procedures shall be defined in the O&M Plan and be refined and updated as changes or improved procedures are developed. The Operations & Maintenance Plan shall be kept current throughout the period of performance.

Subtask 1-F. Operating and Maintenance Manuals
The contractor shall update current operating and maintenance manuals for the inventory of applications. O&M plans exist for overall platform technologies (i.e. Lotus Notes, Oracle) and for significant investment applications (i.e. OMIS, ESC), Separate from the O&M Plan, operating manuals and maintenance manuals shall describe detailed "how-to" procedures. For example, the O&M Plan might require that the system administrator ensure databases are backed up daily. An operation or maintenance manual describes how to do a backup.

Subtask 1-G. Project History Document
Any information that may be needed in the future for any aspect of operation, maintenance, retirement, or replacement shall be recorded and kept up-to-date in the form of a Project History Document (PHD). It is not sufficient to rely on the memory of involved personnel for such information. As a matter of process, the contractor shall at all times provide written documentation detailing any modifications to system components, features, functions, access, security, and overall application architecture and technical environment. Project History

documents at minimum will be updated once a year but as frequently as necessary at the request of the TOCOR/DTOCOR.

Subtask 1-H. STIPS Document Repository
The contractor shall maintain a central repository accessible to TOCORs/TMs of all user manuals, guides, deliverables, and all other relevant documentation within the EPA Portal Workspace Environment. These artifacts shall be created and updated accordingly and stored in a common repository. Changes to the contents of the repository shall be communicated to all relevant stakeholders.

Subtask 1-I. SES3 Contractor Staff Report
The contractor shall provide a completed SES3 Contractor Staff Report.

Deliverables Subtask 1-A through 1-I

Subtask 1-A Progress Reporting:

Each monthly technical status report and financial status report shall be electronically delivered to the Contracting Officer, the BPA Contracting Officer's Representative, and to the Task Order COR.

1-A.1	Monthly Technical Status Reports	on or before the **15th** of each month
1-A.2	Monthly Financial Status Reports	on or before the **15th** of each month

Delivered to the Task Order COR and Deputy TOCOR
Subtask 1-B Financial Reporting and Cost Tracking

1-B.1	Cost Tracking Reports included in the Monthly Financial Status Report	on or before the **15th** of each month
1-B.2	Ad-hoc Cost Tracking Reports	As Requested by TOCOR

Subtask 1-C: Task Order Management Plan

1-C.1	Task Order Management Plan	15 calendar days after Task Order Award

Subtask 1-D: Work Request System

1-D.1	Work Request System (if accepted)	15 calendar days after Task Order Award

Subtask 1-E: Operations and Maintenance Plan

1-E.1	Operation and Maintenance Plan	30 calendar days after Task Order Award

Subtask 1-F: Operating and Maintenance Manuals

1-F.1	Operating and Maintenance Manuals	65 calendar days after Task Order Award

Subtask 1-G: Project History Document

1-G.1	Project History Document(s)	As Required

Subtask 1-H: Document Repository

1-H.1	Document Repository	30 calendar days after Task Order Award

Subtask 1-I: Contractor Staff Report

1-I.1	Contractor Staff Report	10 business days after Task Order award. Subsequent deliveries: The following Friday after changes occur to the Report

Acceptance Criteria for Deliverables:

During the review of deliverables, the TOCOR/TM shall have the right to reject or require correction of any deficiencies found in the deliverables. In the event of rejection of any deliverable, the contractor will be notified in writing by the TOCOR of the specific reasons why the deliverable is being rejected. The contractor shall have 10 calendar days to correct the rejected deliverable and return it to the TOCOR. The following acceptance criterion applies to all tasks:

> **Completeness, clarity, timeliness, organization, consistency, meets requirements, quality, grammatically correct, and technical accuracy.**

ARTICLE I.   *STIPS SUPPORT TASKS*

STIPS Tasks:

2.1.	Testing / Independent Verification and Validation (IV&V)
2.2.	Software Application and Database Implementation
2.3.	Software Application Administration & Management
2.4.	General Database Administration
2.5.	Data Management Support
2.6.	Data Services
2.7.	Change Management
2.8.	Configuration Management
2.9.	Release Management
2.10.	Problem Management
2.11.	Security Management
2.12.	Disaster Recovery
2.13.	User Support
2.14.	System Termination Support

TASK 2.1:   TESTING / INDEPENDENT VERIFICATION AND VALIDATION (IV&V)

During the Testing / Independent Verification and Validation (IV&V) task, various components of the system shall be integrated in a testing environment and checked for issues and interoperability. Software testing may be required at different levels throughout the maintenance process. That is to say, the target of the test can vary: a single module, a group of such modules (related by purpose, use, behavior, or structure) or a whole system.

Testing shall be conducted in view of specific objectives in precise, quantitative terms that allow control to be established over the test process. Test cases shall be designed to check that the functional specifications are correctly implemented and may be aimed at verifying different properties. However, several other non-functional properties may be tested as well, including performance, reliability, and usability, among many others.

> **NOTE:** The IV&V approach shall be appropriate to the complexity, size, and duration of the project and includes custom and commercial off-the-shelf (COTS) / government off-the-shelf (GOTS) software.
>
> Use of production data for testing purposes shall follow a business process that restricts access to data for a limited and specified time period.

Purpose/Use
- [ ] To ensure the system satisfies the user requirements
- [ ] To check for errors or bugs in the code, business rules, or intended processes
- [ ] To validate security requirements are met
- [ ] To validate individual system components integrate properly

Expected Benefits
- [ ] To identify most issues prior to release of the system to the user community
- [ ] To ensure user buy-in and acceptance
- [ ] Increased stakeholder confidence in system development processes
- [ ] Increased effectiveness of the system deployed to production

Anticipated Deliverables
- [ ] Project plans
- [ ] Validation deficiency reports
- [ ] Validation issues
- [ ] Procedure change requests
- [ ] Change requests for the verification methods, criteria, and environment
- [ ] Analysis reports (e.g., statistics on performances, causal analysis of non-conformances, comparison of the behavior between the real product and models, and trends)
- [ ] Trouble reports
- [ ] Test Plans
- [ ] Test Design Specifications
- [ ] Test Procedure Specifications
- [ ] Test Case Specifications
- [ ] Test Logs
- [ ] *As specified in the Appendix and/or specified in TDD or work request*

Successful completion criteria
- [ ] Appropriate types of testing are performed, including integration, system, security, and user acceptance testing and results communicated
- [ ] Formal processes are performed for correcting deficiencies identified during testing and verifying their remediation
- [ ] Testing documentation was complete and adhered to standards.
- [ ] Validation demonstrated that the product, as provided, fulfilled its intended use ("you built the right thing.").

- Verification addressed whether the work product properly reflected the specified requirements ("you built it right").
- Test documentation was produced and continually updated.
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.2: SOFTWARE APPLICATION AND DATABASE IMPLEMENTATION

The Contractor shall use a formal deployment process that addresses infrastructure requirements and deploys the system to a production environment. For example, a new or upgraded COTS product might require additional memory, hardware, or configuration changes and this information must be communicated to all relevant stakeholders including other contracting firms early in the implementation process. Collaboration throughout and with all relevant stakeholders is a critical success factor.

Purpose/Use
- To identify and address hardware and other infrastructure requirements to support the application software
- To deploy new or modified code in a production environment
- To provide appropriate communications to users and other relevant stakeholders
- To address training requirements in conjunction with release

Expected Benefits
- To maximize the efficient use of the system
- To ensure that the right persons have access to the system

Anticipated Deliverables
- Project plans
- Training guides
- Manuals
- Code
- *As specified in the Appendix, and/or specified in TDD or work request*

Successful completion criteria
- Communication and training channels are fully leveraged during application deployment
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.3: SOFTWARE APPLICATION ADMINISTRATION & MANAGEMENT

The Software Applications Administration and Management function shall perform the processes required for the delivery of services and processing, storage, and data transfer capacity at the levels required by application owner's specifications.

The Contractor shall establish formal system administration procedures to manage the maintenance of production applications and systems software to ensure reliable and efficient use.

The Contractor shall implement standard, formal processes for ensuring the optimal operation of its systems and making information easier to access and use.

The Contractor shall employ application administration procedures to ensure that applications are available to authorized users and are configured properly. Application administration activities include setting up user accounts, configuring application settings, addressing simple application or data issues, and accessing system functions that require administrative levels of access.

Purpose/Use
- To ensure the application is configured appropriately
- Track requests for bug fixes, enhancements, or modifications to an existing system
- Assess and document the level of effort to address a request
- Organize and group requests into releases and/or patches.

Expected Benefits
- Reduced productivity losses that occur when the application is not appropriately configured, unstable, or performance is less than optimal.

Anticipated Deliverables
- Project plans
- Documented System Administration Procedures
- *As specified in the Appendix, and/or specified in TDD* or work request

Successful completion criteria
- Single point of responsibility and accountability for application administration guidelines, processes, and procedures
- Defined and formal responsibilities of system administrator(s) with each system having a designated application administrator
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.4: GENERAL DATABASE ADMINISTRATION
The contractor shall provide general database administration to manage data, maintain operations, secure, and ensure integrity of data. Other requirements include:
- Administer database and related operating system settings, such as security, compact/defragment frequency, and linkages to other databases
- Create, run, and optimize queries to view or manipulate data
- Copy or move databases or related database objects (e.g. tables, queries).

Data management may include:
- Configuring data files for users
- Managing disk/database/table storage, capacity, and transaction resources
- Capacity planning
- Back-up and archiving records / files
- Report of the means for verifying data integrity.

Deliverables

A. Non-recurring report(s) concerning data base administration systems support activities and procedures. Reports will be requested via work request and date of delivery will be specified at time of request.
B. Non-recurring Configuration and Standard Operating Procedure (SOP) documentation. This will require the following:

- Configuration manuals for database instance configuration, and location of all files associated with each instance, file protection settings for all files, security configuration, location of scripts, parameter files, etc.
- Database software installation SOP;
- Database software upgrades SOP;
- Database instance installation, configuration, and maintenance SOP;
- SOP for populating test and pre-release instances with data from production instance;
- SOP for point-in-time recovery from database failure
- SOP describing how and where developers deliver new versions of software;
- SOP describing the database administrator process for installation and testing of a newly delivered application in test, pre-release and production instances.
- SOP describing the entire process from delivery of a new application version through testing and installation in production instance, including time line, milestones, roles and responsibilities.

C. Project plans
D. As specified in the Appendix, and/or specified in TDD or work request

Acceptance Criteria
☐ The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.5: DATA MANAGEMENT SUPPORT

EPA's ability to share data among EPA offices and its partners is dependent upon quality data management services. As increasing amounts of data flow within and between organizations, the problems that can result from poor data management practices are becoming more apparent. A critical success factor for this task is to understand where data is stored and manage the potential conflicts that arise when copies of that data are out of sync with one another.

The services within the scope of *Data Management Support* may include:
☐ Create, implement, and maintain ORD, EPA data assets following national, and international data standards
☐ Design and preparation of data coding schemes and maintenance of code sets
☐ Design of quality assurance methods; enforcement of data quality
☐ Metadata and content management, data mining, and evaluation of new data management technologies
☐ Integration of data across enterprise
☐ Provide reliable access to data

The Contractor shall follow a formal, standard data management process and functional approach to efficiently manage user access to application data. This function shall include the management of other structured and unstructured content at the data management layer.

Purpose/Use
☐ To structure and organize data via use of a database management system
☐ To create and manage data warehouses where information is gathered from various databases and compiled in a way that supports decision-making activities
☐ To create and manage data mining systems that analyze data to show patterns or relationships
☐ To identify inconsistencies and other deficiencies in data

- To protect data and prevent data corruption
- To maintain database software infrastructure such as configurations, data replication routines, scripts, indexes, etc.
- To conduct queried data scrubbing activities to 'clean' data, such as eliminating duplicate records

Expected Benefits
- Integrity, security, reliability, and availability of application data
- Decreased costs associated with security breaches and corruption of data
- Increased ability to identify trends that may be helpful in the accomplishment of ORD objectives

Deliverables
- Project plans
- Reports
- As specified in the Appendix, and/or specified in TDD or work request

Acceptance Criteria
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.6: DATA SERVICES

EPA supports a variety of data requirements, from financial and administrative to vast quantities of GIS, modeling, and other scientific data. The scope of work for the data services principal competency covers all **non-science** aspects of data support services including:
- Data migration
- Data subscription services
- Data transfer
- Data warehouse
- Database optimization
- Search and search engine optimization, metadata, findability
- Data conversion
  - Verify procedures are in place and are being followed to review the completed data for completeness and accuracy and to perform data clean-up as required
  - Determine conversion error rates and whether the error rates are manageable
  - Make recommendations on making the conversion process more efficient and on maintaining the integrity of data during the conversion.
- Database design
  - Evaluate new and existing database designs to determine if they meet existing and proposed system requirements.
  - Recommend improvements to existing designs to improve data integrity and system performance.
  - Evaluate the design for maintainability, scalability, refresh-ability, concurrence, normalization (where appropriate) and any other factors affecting performance and data integrity.
  - Evaluate the TO process for administering databases, including backup, recovery, performance analysis and control of data item creation.

Deliverables
- Project plans

- Reports
- Checklists, procedure documents
- Periodic archive creation and delivery of all project artifacts, materials, and deliverables
- As specified in the Appendix, and/or specified in TDD or work request

Acceptance Criteria
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.7: CHANGE MANAGEMENT

ORD seeks to leverage a single, standard change management process for all applications covered under this TO that effectively classifies change requests into priority queues and enables ORD to understand the costs associated with major changes. This approach will enable ORD to manage the process by which changes are requested, reviewed, approved, and processed and with an expected result of increased visibility into and accountability for change related activities.

Expected Benefits
- Increased effectiveness of change processing and implementation of requested changes
- Decreased costs associated with processing required changes
- Increased customer satisfaction through increased awareness of planned and unplanned events that impact resource availability

Deliverables
- Project plans
- Requirements documents
- Problem reports
- Change requests
- Change logs
- Change technical feasibility analysis documents
- Change costs and benefits
- Change impact analysis
- Change planning
- Test reports
- Documentation
- System release
- Change verification
- Deviation authorizations; waivers
- As specified in the Appendix, and/or specified in TDD

Successful completion criteria
- Single point of accountability for effective change management
- A unified change management process
- Integrate change management processes with configuration, asset, and other processes following Contractor's CMMI processes.
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.8: CONFIGURATION MANAGEMENT

Configuration management processes shall be used to manage the synchronization of any changes that may occur during the maintenance of the system.

Change control procedures shall facilitate input for periodic audits to confirm procedures are being followed and the functionality and physical characteristics of the system match those required by the approved configuration documentation.

Deliverables
- Project plans
- As specified in the Appendix, and/or specified in TDD or work request
- Accurate estimates of resources needed to perform the work
- Cost/benefits analysis of the requested change
- Process descriptions
- Requirements
- Designs
- Test plans and procedures artifacts
- Test results artifacts
- Interface descriptions
- Drawings
- Source code
- Configuration Documents
- Tools (e.g., compilers)

Successful completion criteria
- Configuration Management (CM) Plans comply with industry standards and best practices, policies, requirements, and provided follow-up for non-conformances.
- Software configuration identification was consistent and accurate with respect to the software modules, software units, and associated software documents.
- Configuration control was maintained such that the software configuration used in critical phases of testing, acceptance, and delivery was compatible with the associated documentation.
- Configuration status accounting was performed accurately including the recording and reporting of data reflecting the software's configuration identification, proposed changes to the configuration identification, and the implementation status of approved changes.
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.9: RELEASE MANAGEMENT

ORD seeks to leverage the Contractor's standard release processes to ensure changes are performed in a manner that minimizes risk to its production environment.

A successful software project release is one that releases at the right time, does not negatively impact customers and users, delivers the business value it was designed to address, and does not cause an inordinate impact on user support teams. The Contractor shall follow their CMMI processes and procedures for release management and work collaboratively with all stakeholders, including other BPA contractors. It is anticipated that the bulk of software releases will be emergency or minor.

Functional and physical audits shall be performed before the release of the software to verify that all the necessary software configuration items are present, consistent and correct.

Deliverables
- As specified in the Appendix, and/or specified in TDD or work request
- Project plans
- Release plans
- Contingency plans
- Release numbers

> *For example, Microsoft uses a standard scheme by which anyone can tell the release type simply by looking at the version number:*
>
> *x.0.0.0—The first number signifies major version release of the product.*
>
> *0.x.0.0—The second number signifies the minor version release of the product.*
>
> *0.0.x.0—The third number signifies the service pack release of the product.*
>
> *0.0.0.x—The fourth number signifies the hotfix release of the product.*

Successful completion criteria
- A formal release management process with documentation standards/systems
- Software released at the right time, does not negatively impact customers and users, delivers the business value it was designed to address, and does not cause an inordinate impact on user support teams
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.10: PROBLEM MANAGEMENT

The Contractor shall use a formal problem management approach including specific accountability to TOCOR management to identify and respond to both single and recurring problems associated with ORD software applications and data resources. This function shall focus on root-cause analysis as well as proactive solutions to issues of an escalating nature.

Deliverables
- Project plans
- Root cause analysis reports
- Documented processes and standards
- As specified in the Appendix, and/or specified in TDD or work request

Successful completion criteria
- Formal problem management processes and documentation standards/systems
- The adoption of a single enterprise-wide bug and enhancement tracking system
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.11: SECURITY MANAGEMENT

The security management function shall be responsible for managing the operational and planning aspects of information security. Responsibilities for this function shall be:

- To review security requirements and develop organizational plans to address requirements
- To monitor security and user access permissions
- To ensure users have appropriate application rights and permission
- To ensure data is protected
- To assess the impact of proposed activities or changes on security
- To define policies for data and technical resource security
- To assess and recommend revisions to processes or data center configurations to increase security
- To investigate and review security threats, vulnerabilities, or incidents

Expected Benefits
- Reduced productivity losses that occur when the application security is not appropriately configured;
- Increased security of data and other technical resources;
- Decreased risk of security breaches or lapses, and
- Sustained security standards.

Deliverables
- As specified in the Appendix, and/or specified in TDD or work request
- As specified or required by ASSERT, a tool that supports the National Institute of Standards and Technology's (NIST) and the Office of Management and Budget's requirements for reporting under the Federal Information Security Management Act (FISMA), with to-do lists and reports to guarantee compliant system security.
- Impact analysis
- Project plans
- Test plans
- Security assessment reports
- Documentation

Successful completion criteria
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.12: DISASTER RECOVERY SUPPORT

The contractor shall provide technical support for Information Security and Disaster Recovery Planning in relation to the database applications. The Information Security Plan shall include physical and system security, roles, and triggers, etc. The Disaster Recovery Plan shall include designation of the Contractor's readiness team, identification of recovery priorities, development of emergency and recovery procedures, description of contingency site(s) and testing and maintenance of the plan. In addition, the contractor shall provide security management of the software which includes installing and maintaining Agency standard database security software. The contractor shall provide technical support for any security action/issue that affects the application-operating environment. The contractor shall apply security patches to the database and provide a monthly report of Security Activities for servers.

Deliverables

- As specified in the Appendix, and/or specified in TDD or work request
- Impact analysis
- Project plans
- Information security plans
- Disaster recovery plans
- Emergency and recovery procedures

Successful completion criteria
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.13: USER SUPPORT

Depending on any number of factors (i.e. complexity), some software applications may require ad hoc second- or third-tier user support. This support will be elaborated on at the TDD-level. Typical support activities may include logging and tracking all forms of customer communications received (e.g. telephone, email, electronic, etc.) with follow-up contact to understand the problem (if appropriate), providing immediate resolution as appropriate, assigning incident to the appropriate party or parties, and tracking incidents to closure. All support calls are received and logged by the ORD Help Desk and will be routed to the appropriate resource. The contractor shall implement the appropriate business processes to consistently manage this function. Business processes shall be implemented by the contractor that shall institutionalize common and standard operating procedures targeted at reducing end-user support calls and facilitate a self-service user culture.

Specific requirements for user support activities may include training users to operate the software and understand the products and services and providing direct assistance during operations.

Deliverables
- As specified in the Appendix, and/or specified in TDD
- Logs
- Metrics
- Resolution reports
- Procedures
- Documentation
- Training plans
- Training syllabi

If user training is required, the amount of training may depend upon the experience of the users and the complexity or novelty of the software.

Acceptance Criteria
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

TASK 2.14: SYSTEM TERMINATION SUPPORT

The contractor shall support and facilitate removal of existing systems or parts of a system from the production environment. Activities may include:

- Deactivation of system with recovery capability
- Packaging and archiving of current data (including software code, runbooks, compilers, tools, and other information)
- Migration of data
- Disposition of software components

Deliverables:
- Project plan
- Retirement Plan
- Transition Plan
- Archive of Data and Software

Acceptance Criteria:
- The deliverable was developed in accordance with CMMI, PMBOK, or substantially and acceptably similar standards.

Terms & Conditions

Contracting Officer Representatives (CORs)
CORs include the BPA Contracting Officer's Representative (BPACOR), Task Order COR (TOCOR), Alternate TOCOR (ATOCOR), and Technical Monitors (TM). Only a COR may issue TDDs, work requests, and technical direction. Only a COR may call meetings with customers, end-users, or clients. The contractor may schedule meetings with CORs. Meetings seeking technical clarification that does not involve tasking are informal in nature and do not require COR coordination.

Technical Direction
(a) The BPA Contracting Officer's Representative is the primary representative of the Contracting Officer authorized to provide technical direction on task order performance.
(b) Individuals other than the BPACOR may be authorized to provide technical direction. If individuals other than the BPACOR are authorized to provide technical direction, their names will be specified by task order or technical directive documents (TDDs) as appropriate. A TOCOR, Technical Monitor, or other designee is authorized to provide technical direction, subject to the limitations set forth below, only on his/her task order or technical directive document.
(c) Technical direction includes:
> (1) Direction to the contractor which assists the contractor in accomplishing the Statement of Work.
> (2) Comments on and approval of reports or other deliverables.

(d) Technical direction must be within the BPA and the task order, or technical directive document statement of work. The BPACOR or any other technical representative of the Contracting Officer does not have the authority to issue technical direction which (1) institutes additional work outside the scope of the BPA, task order, or technical directive document; (2) constitutes a change as defined in the "Changes" clause; (3) causes an increase or decrease in the estimated cost of the BPA, task order, or technical directive document; (4) alters the period of performance; or (5) changes any of the other express terms or conditions of the BPA, task order, or technical directive document.
(e) Technical direction will be issued in writing or confirmed in writing within five (5) calendar days after verbal issuance. **One copy of the technical direction memorandum will be forwarded to the Contracting Officer and the BPACOR.**

Other Direct Costs and Travel

(1) Other Direct Costs—Other Direct Costs (ODCs) are items which are allowable and allocable direct costs to the task order for which EPA may reimburse the Contractor. Such items shall be charged in accordance with the Contractor's established and accepted accounting practices except as stated below. The Task Order COR (TOCOR) may provide approval for materials and supplies up to $500.00 (for a single item or a related group of items). For costs beyond $500.00, the EPA Contracting Officer's approval is required. This consent is only intended to be a determination of technical reasonableness and is not a pre-determination as to the allowability of these costs. Equipment is considered to be "facilities" for the purpose of Part 45 of the Federal Acquisition Regulation and, with certain exceptions, may not be reimbursed as a direct charge to the contract.

(2) Travel—Travel up to $1,000.00 for a single trip (e.g. one trip for 3 people or 1 trip for 1 person) are not allowable as a charge to this task order without prior written consent of the TOCOR. Travel in excess of $1,000 for a single trip is not allowable as a charge to this task order without prior written consent of the Contracting Officer. Except as explicitly set forth below, the Contractor shall be reimbursed for allowable and allocable travel costs actually incurred by and paid to the Contractor's employees, provided such costs do not exceed the amount that would be payable to an employee of the Environmental Protection Agency conducting the same travel while on Government business. In determining the dollar value of allowable contractor employee travel costs, the limitation of the Federal Travel Regulations effective on the date of travel will apply to contractor employees to the same extent they apply to Federal Government employees.

(3) The Contractor may be required to furnish to the Contracting Officer documentary proof of every travel expenditure that exceeds twenty-five dollars ($25), including receipts for common carrier transportation expenditures. Bona fide lodging receipts may be required to be submitted by the Contractor along with the monthly invoices.

(4) The Contractor may elect to reimburse its employees for meals and incidental expenses (as defined in the Federal Travel Regulations) on a per diem basis, and the Contractor will be reimbursed for such payments. In no event shall the reimbursement allowed under this provision exceed the standard per diem for meals and incidental expenses allowable under the Federal Travel Regulations.

(5) To the maximum extent practicable consistent with travel requirements, the Contractor agrees to use the reduced air transportation and hotel/motel rates and services provided through available Government discount air fares and lodging rates for bona fide employees' travel that is otherwise reimbursable as a direct cost pursuant to this contract when use of such rates results in the lowest overall cost. The Contractor shall submit requests, including pertinent information, for specific authorization to use these rates to the Contracting Officer.

52.217-8 Option to Extend Services (Nov 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 30 days.

52.217-9 Option to Extend the Term of the Contract (Mar 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 30 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed seventy two (72) months.

Travel Required By Contractor Staff

Contractor staff may be required to travel in support of this Task Order. The following shows the locations to which travel may occur.

The contractor shall generate and submit to the TOCOR, a detailed Trip Report within five working days of completing the travel. The trip report shall contain the purpose of the trip, its length, location visited, issues/information obtained on the trip, action items and recommendations resulting from the trip that impact the services being delivered. Also include as appropriate meeting agenda(s), meeting minutes; goals, outcomes.

City	State
Ada	OK
Athens	GA
Cincinnati	OH
Corvallis	OR
Duluth	MN
Edison	NJ
Grosse Ile	MI
Gulf Breeze	FL
Las Vegas	NV
Narragansett	RI
Newport	OR
Research Triangle Park	NC
Washington	D.C.

TOCOR Approval of Training

The contractor shall provide and maintain a qualified staff of personnel to meet the requirements of the Statement of Work. The contractor shall provide training at no cost to government to keep its personnel abreast of changes to the science and/or technology associated with the requirements of the task order (includes requirements specified in attachment 3-A). In addition, the contractor shall ensure that its personnel receive appropriate safety, health and environmental training in accordance with Federal, state and local requirements prior to assigning any task that require such training. The contractor shall provide documentation of such training upon the request of the BPA Contracting Officer's Representative and/or Contracting Officer (CO).

The Government will not directly reimburse the cost for contractor employees to meet or maintain minimal task order requirements or to obtain and sustain an appropriate level of professionalism. Any direct charges for training will only be considered for

reimbursement under this task order by compliance with the procedures set forth in the paragraph below.

There may be occasions when it is determined to be in the best interest of the Government to reimburse the contractor for the direct cost of training associated with a requirement that represents a unique Government need unrecognized at the time of task order award. When such circumstances occur, the contractor shall secure the CO prior written approval by submitting a written request to the TOCOR that includes, at a minimum the following information:

a. Individual to be trained (Identify position and job duties under task order.)
b. Description of circumstances necessitating the training. (Describe the specific change to the performance requirements. Identify by number and title of the task order(s) that will benefit from training and describe in detail how the training relates to the Statement of Work and job duties under the task order.)
c. Estimated cost (Include a cost breakdown with an explanation of why this is the most cost effective means to fulfill the task order requirements.)
d. The contractor may include a request to use Government facilities for EPA-requested training only. The use of Government facilities for any other training is prohibited.

The Contracting Officer will provide the contractor with written approval or disapproval of the request. Approval of a task order quote that includes training as an other direct cost element shall not be construed to mean the training is approved; i.e., the contractor shall obtain written approval for the training as described. Training billed as a direct cost shall be disallowed by the TOCOR unless approved.

Treatment of Confidential Business Information

(a) The Task Order COR or his/her designee, after a written determination by the appropriate program office, may disclose confidential business information (CBI) to the Contractor necessary to carry out the work required under this task order. The Contractor agrees to use the CBI only under the following conditions:

(1) The Contractor and Contractor's employees shall: (i) use the CBI only for the purposes of carrying out the work required by the task order; (ii) not disclose the information to anyone other than properly cleared EPA employees without the prior written approval of the Assistant General Counsel for Contracts and Information Law; and (iii) return the CBI to the TOCOR or his/her designee, whenever the information is no longer required by the Contractor for performance of the work required by the task order, or upon completion of the task order.

(2) The Contractor shall obtain a written agreement to honor the above limitations from each of the Contractor's employees who will have access to the information before the employee is allowed access.

(3) The Contractor agrees that these task order conditions concerning the use and disclosure of CBI are included for the benefit of, and shall be enforceable by, both EPA and any affected businesses having a proprietary interest in the information.

(4) The Contractor shall not use any CBI supplied by EPA or obtained during performance hereunder to compete with any business to which the CBI relates.

(b) The Contractor agrees to obtain the written consent of the CO, after a written determination by the appropriate program office, prior to entering into any subcontract that will involve the disclosure of CBI by the Contractor to the subcontractor. The Contractor agrees to include these provisions, including this paragraph (b), in all subcontracts awarded pursuant to this task order that require the furnishing of CBI to the subcontractor.

Handling Confidential Business Information (CBI)

The Contractor shall notify the Government if any situation arises where contractor personnel may have had access to confidential business information, or sensitive information. The situation shall be handled in accordance with CBI related clauses in the contract and the Contractor shall promptly deliver the material to the TOPO for appropriate action.

Release of Contractor Confidential Business Information

(a) The Environmental Protection Agency (EPA) may find it necessary to release information submitted by the Contractor either in response to this solicitation or pursuant to the provisions of this task order, to individuals not employed by EPA. Business information that is ordinarily entitled to confidential treatment under existing Agency regulations (40 C.F.R. Part 2) may be included in the information released to these individuals. Accordingly, by submission of this proposal or signature on this task order or other contracts, the Contractor hereby consents to a limited release of its confidential business information (CBI).

(b) Possible circumstances where the Agency may release the Contractor's CBI include, but are not limited to the following:

(1) To other Agency contractors tasked with assisting the Agency in the recovery of Federal funds expended pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Sec. 9607, as amended, (CERCLA or Superfund);

(2) To the U.S. Department of Justice (DOJ) and contractors employed by DOJ for use in advising the Agency and representing the Agency in procedures for the recovery of Superfund expenditures;

(3) To parties liable, or potentially liable, for costs under CERCLA Sec. 107 (42 U.S.C. Sec. 9607), et al, and their insurers (Potentially Responsible Parties) for purposes of facilitating settlement or litigation of claims against such parties;

(4) To other Agency contractors who, for purposes of performing the work required under the respective contracts, require access to information the Agency obtained under the Clean Air Act (42 U.S.C. 7401 et seq.); the Federal Water Pollution Control Act (33 U.S.C.1251 et seq.); the Safe Drinking Water Act (42 U.S.C. 300f et seq.); the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136 et seq.); the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.); the Toxic Substances Control

Act (15 U.S.C. 2601 et seq.); or the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601 et seq.);

(5) To other Agency contractors tasked with assisting the Agency in handling and processing information and documents in the administration of Agency contracts, such as providing both preaward and post award audit support and specialized technical support to the Agency's technical evaluation panels;

(6) To employees of grantees working at EPA under the Senior Environmental Employment (SEE) Program;

(7) To Speaker of the House, President of the Senate, or Chairman of a Committee or Subcommittee;

(8) To entities such as the General Accounting Office, boards of contract appeals, and the Courts in the resolution of solicitation or contract protests and disputes;

(9) To Agency contractor employees engaged in information systems analysis, development, operation, and maintenance, including performing data processing and management functions for the Agency; and

(10) Pursuant to a court order or court-supervised agreement.

(c) The Agency recognizes an obligation to protect the contractor from competitive harm that may result from the release of such information to a competitor. Except where otherwise provided by law, the Agency will permit the release of CBI under subparagraphs (1), (3), (4), (5), (6), or (9) only pursuant to a confidentiality agreement.

(d) This clause does not authorize the Agency to release the Contractor's CBI to the public pursuant to a request filed under the Freedom of Information Act.

(e) The Contractor agrees to include these provisions, including this paragraph (e), in all subcontracts at all levels awarded pursuant to this task order that require the furnishing of confidential business information by the subcontractor.

Government Contractor Relations

(a) The Government and the Contractor understand and agree that the services to be delivered under this task order by the contractor to the Government are non-personal services and the parties recognize and agree that no employer-employee relationship exists or will exist under the task order between the Government and the Contractor's personnel. It is, therefore, in the best interest of the Government to afford both parties a full understanding of their respective obligations.

(b) Contractor personnel under this task order shall not:

(1) Be placed in a position where they are under the supervision, direction, or evaluation of a Government employee.

(2) Be placed in a position of command, supervision, administration or control over Government personnel, or over personnel of other Contractors under other EPA contracts, or become a part of the Government organization.

(3) Be used in administration or supervision of Government procurement activities.

(c) Employee Relationship:

(1) The services to be performed under this task order do not require the Contractor or his/her personnel to exercise personal judgment and discretion on behalf of the Government. Rather the Contractor's personnel will act and exercise personal judgment and discretion on behalf of the Contractor.

(2) Rules, regulations, directives, and requirements that are issued by the U.S. Environmental Protection Agency under its responsibility for good order, administration, and security are applicable to all personnel who enter the Government installation or who travel on Government transportation. This is not to be construed or interpreted to establish any degree of Government control that is inconsistent with a non-personal services contract.

(d) Inapplicability of Employee Benefits: This task order does not create an employer-employee relationship. Accordingly, entitlements and benefits applicable to such relationships do not apply.

(1) Payments by the Government under this task order are not subject to Federal income tax withholdings.

(2) Payments by the Government under this task order are not subject to the Federal Insurance Contributions Act.

(3) The Contractor is not entitled to unemployment compensation benefits under the Social Security Act, as amended, by virtue of performance of this task order.

(4) The Contractor is not entitled to workman's compensation benefits by virtue of this task order.

(5) The entire consideration and benefits to the Contractor for performance of this task order is contained in the provisions for payment under this task order.

(e) Notice. It is the Contractor's, as well as, the Government's responsibility to monitor task order activities and notify the Contracting Officer if the Contractor believes that the intent of this clause has been or may be violated.

(1) The Contractor should notify the Contracting Officer in writing promptly, within 5 calendar days from the date of any incident that the Contractor considers to constitute a violation of this clause. The notice should include the date, nature and circumstance of the conduct, the name, function and activity of each Government employee or Contractor official or employee involved or knowledgeable about such conduct, identify any documents or substance of any oral communication involved in the conduct, and the estimate in time by which

32

the Government must respond to this notice to minimize cost, delay or disruption of performance.

(2) The Contracting Officer will promptly, within 5 calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer will either:

    (i) Confirm that the conduct is in violation and when necessary direct the mode of further performance,

    (ii) countermand any communication regarded as a violation,

    (iii) deny that the conduct constitutes a violation and when necessary direct the mode of further performance; or

    (iv) in the event the notice is inadequate to make a decision, advise the Contractor what additional information is required, and establish the date by which it should be furnished by the Contractor and the date thereafter by which the Government will respond.

Technical/Technology Knowledge, Skills, and Abilities (this list is not all inclusive and as technology changes so may the required skills)[4]

Supported DBMS systems	ASP.Net
ArcGIS	ArcIMS
Arcpad	ArcView
C	COBOL
Cold Fusion	c.Support
Data Warehouse	dBase/Clipper
Docket Projects	ESAM
FORTRAN	IBM MVS
Lotus Notes	MapWindow
MS Access	MS Excel
MS Visual Basic	MS Visual Safe Source
MySQL	Northern Lights
Office Forms Facilitator (ADMINLAN)	Open Source Databases
Oracle	Oracle Developer 2000
PaperBridge	PowerBuilder
R	Remedy
SAS	Splus
SQL Lite	SQL Server
ThinkGeo	Tomcat
Unix	VB.Nety
Web forms	Windows XP Pro & MS Windows NT environments
WebMethods	WebSphere

---

[4] Also refer to attachment 3-A of the BPA SOW.

http://intranet.epa.gov/oei/imitpolicy/qic/ciopolicy/2100.5.pdf

http://www.epa.gov/irmpoli8/ciopolicy/CIO%202121.0%20-p-01.0.pdf

APPENDIX: DELIVERABLES

Phase/Sub-phase Sequencing - The phase/sub-phase sequencing for the Major System and CPIC-Lite standard work patterns is found in the SLCM Procedure. The Concept Exploration sub-phase is optional for Non-CPIC investments, when the work is not a new investment. The Requirements and Design sub-phases may be combined, as may the Testing and Implementation sub-phase/phase. However, all requirements must be completed in the manner laid out in the SLCM Procedure.

NOTE: Major Work Products are not covered under this TO SOW. STIPS is primarily small & other work products.

Implementation Phase

Steps ☑ Required	Majors Work Products > $2M	Non-Majors Work Products > $250K	Small & Other Work Products < $250K	Guidance and Tools

☑ 1. Issue Implementation Notice

☑ Send implementation notice to all users and organizations affected by the implementation	• Implementation Decision Paper	•Implementation Decision Paper	• Implementation Decision Paper	• EPA Draft SLCM Procedure Section 3.3 • EPA Draft SLCM Procedure Attachment 3

☑ 2. Manage System Implementation and Operational Validation

☑ Manage installation and operationalization of system in production environment following System Implementation Plan and other applicable artifacts ☑ Convert existing data for use in new system, if needed ☑ Verify system operation and, if needed, integrity of converted data	• System modules • Version Description Documents • Converted data • Change Implementation Notices	• System modules • Version Description Documents • Converted data • Change Implementation Notices	• System modules • Converted data • Change Implementation Notices	• EPA Draft SLCM Procedure Section 3.3 • EPA Draft SLCM Procedure Attachment 3

☐ 3. Maintain Security C&A

☐ Oversee continuous monitoring of security controls ☐ Perform periodic re-evaluations of security categorization, reviews of security controls, and re-certifications ☐ Revise security plan and self-assessment as needed ☐ Complete outstanding POA&Ms	• Updated Security Plan • Updated Security Accreditation Package • Updated ASSERT record • Authorization to Operate	• Updated Security Plan • Updated Security Accreditation Package • Updated ASSERT Record • Authorization to Operate	• Updated Security Accreditation Package • Updated ASSERT record • Authorization to Operate	• EPA Draft SLCM Procedure Section 3.3 • EPA Draft SLCM Procedure Attachment 3 • NIST SP 800-26 (Revised & Draft Rev. 1), SP 800-37, SP 800-53 (Draft Rev. 1), Draft SP 800-53A • ASSERT Intranet site

☑ 4. Provide input to update Solution Architecture (if changes occurred)

☑ Provide input to update Solution Architecture (if changes occurred) following work from Acquisition/Development Phase Step 18 (Acquisition/Development Phase) ☑ Provide input to update READ record	• Updated Solution Architecture • Information for TM to update READ record • Updated Source content for Exhibit 300	• Updated Solution Architecture • Information for TM to update READ record	• Information for TM to update READ record	• EPA EA Governance Procedure Section 3 • EPA EA Compliance Package • READ Intranet Site • Exhibit 300 Guidance

☐ 5. Track EVM Actuals (NOT APPLICABLE)

☐ *Continue comparing actual cost and schedule performance data*	• *Source content for Exhibit 300* • *EVM Actuals for quarterly reporting*			• *EPA CPIC Procedures* • *EPA EVM Procedures* • *Exhibit 300 Guidance*

☑ 6. Review and Modify Business Case

☐ *Review Exhibit 300 and modify based on CPIC Control results* ☑ Provide input to update eCPIC record	• Updated Exhibit 300 • Information for TM to update eCPIC record	• Information for TM to revise CPIC Lite		• EPA CPIC Procedures • EPA Exhibit 300 / CPIC Proposal Guidance • OMB Circular No. A-11 Parts 2 & 7, Capital Programming Guide • eCPIC

☑ 7. Undergo Post-Implementation Review

☐ *Coordinate review of Solution Architecture* ☑ Coordinate and contribute to Post-Implementation Review (PIR)	• Approval of Solution Architecture (if necessary) • PIR Report • PIR acceptance • Approval to proceed to Operations and Maintenance Phase	• Approval of Solution Architecture (if necessary) • Approval to proceed to Operations and Maintenance Phase	• Approval to proceed to Operations and Maintenance Phase	• EPA EA Governance Procedure Section 3 • EPA EA Compliance Package • EPA Draft SLCM Procedure Attachment 3 • EPA CPIC Procedures

Operations and Maintenance (O&M) Phase

Steps	Majors Work Products	Non-Majors Work Products	Small & Other Work Products	Guidance and Tools

☑ 1. Manage System O&M

☑ Oversee operations support ☑ Oversee data and software administration ☑ Oversee configuration management and change control	• Updated System Documentation • CM and Change Control Reporting	• Updated System Documents	• Updated System Documents	• EPA Draft SLCM Procedure Section 3.4 • EPA Draft SLCM Procedure Attachment 4

☑ 2. Manage System Risk

☑ Provide input to revise risk assessments and risk inventory as needed	• Information for TM to update Risk Management Plan • Information for TM to update source content for Exhibit 300	• Information for TM to update Risk Management Plan	• Information for TM to update Risk Management Plan	• NIST SP 800-30 • Exhibit 300 Guidance

Operations and Maintenance (O&M) Phase

| Steps	Majors Work Products	Non-Majors Work Products	Small & Other Work Products	Guidance and Tools
☑ 3. Maintain Security C&A				
☑ Oversee continuous monitoring of security controls ☑ Perform periodic re-evaluations of security categorization, reviews of security controls, and re-certifications ☑ Revise security plan and self-assessment as needed ☑ Complete outstanding POA&Ms	• Updated Security Plan • Updated Security Accreditation Package • Updated ASSERT record • Re-Authorization to Operate	• Updated Security Plan • Updated Security Accreditation Package • Updated ASSERT record	• Updated Security Plan • Updated Security Accreditation Package • Updated ASSERT record	• EPA Draft SLCM Procedure Section 3.4 • EPA Draft SLCM Procedure Attachment 4 • NIST SP 800-26 (Revised & Draft Rev. 1), SP 800-37, SP 800-53 (Draft Rev. 1), Draft SP 800-53A • ASSERT Intranet Site
☑ 4. Update Solution Architecture				
☑ Update Solution Architecture following work from Step 4 (Implementation Phase) ☑ Provide input to update READ record	• Updated Solution Architecture • Information for TM to update READ record • Information for TM to update source content for Exhibit 300	• Updated Solution Architecture • Information for TM to update READ record	• Information for TM to update READ record	• EPA EA Governance Procedure Section 3 • EPA EA Compliance Package • READ Intranet Site • Exhibit 300 Guidance
❑ 5. Conduct Operational Analysis				
❑ Continue comparing actual cost and schedule performance data	• Source content for Exhibit 300 • Operational Analysis Report			• EPA CPIC Procedures • OA Guidance Document • Exhibit 300 Guidance
☑ 6. Review and Modify Business Case				
❑ *Review and modify business case based on Control Phase results and PIR* ☑ Provide input to update eCPIC record (calendar-based)	• Information for TM to update Exhibit 300 • Information for TM to update eCPIC record	• Information for TM to update eCPIC record		• EPA CPIC Procedures • EPA Exhibit 300 / CPIC Proposal Guidance • OMB Circular No. A-11 Parts 2 & 7, Capital Programming Guide • eCPIC
☑ 7. Undergo In-Process Review				
☑ Coordinate review of Solution Architecture ☑ Coordinate In-Process Review ☑ Coordinate User Satisfaction Review	• User Satisfaction Review • System Diagnosis leading to system maintenance or new development	• User Satisfaction Review	• User Satisfaction Review	• EPA EA Governance Procedure Section 3 • EPA EA Compliance Package • EPA Draft SLCM Procedure Attachment 4

Operations and Maintenance (O&M) Phase

Steps	Major Work Products	Non-Majors Work Products	Small & Other Work Products	Guidance and Tools

☑ 8. Undergo Control Gate #4 – Modify or Terminate

☑ Coordinate with stakeholders to perform Modify or Terminate Review of the system	• Re-Authorization to Operate	• Re-Authorization to Operate	• Re-Authorization to Operate	• EPA Draft SLCM Procedure Section 3.4 • EPA Draft SLCM Procedure Attachment 4 • Control Gate Reviews section of EPA SLCM Attachments

Standard (Full) Work Pattern
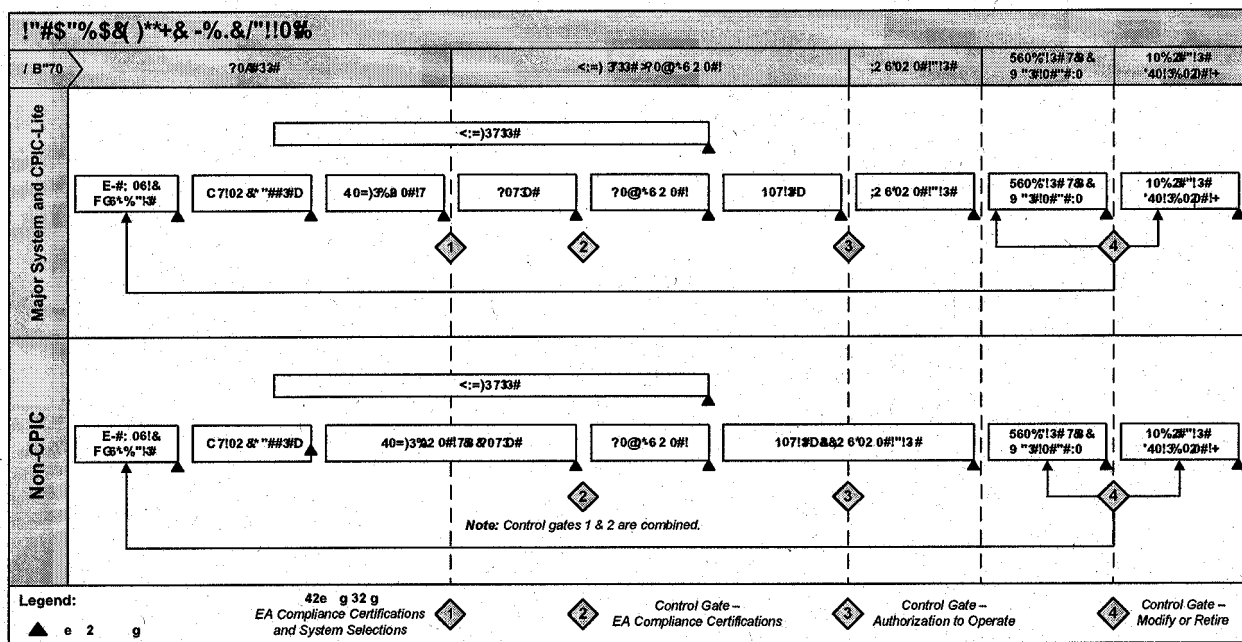
- **Description** - The standard (full) work pattern follows the general pattern laid out in the SLCM Procedure. Also known as the "waterfall" model, it follows a linear process to implement an information system.
- **Appropriate Uses** - The standard work pattern is appropriate for all projects that require a high degree of control and where there is single implementation.
- **Strengths** - The standard work pattern is simple to follow and is a recognizable pattern familiar to most stakeholders. It provides strong controls and project reviews.
- **Weaknesses** - Because it moves all of the work through a specific sub-phase at once, schedules can become drawn out, especially in large projects. Where functionality can be released incrementally, you should consider the Managed Evolutionary Development (MED) work pattern.

APPENDIX: DELIVERABLES

- **Phase/Sub-phase Sequencing** - The phase/sub-phase sequencing for the Major System and CPIC-Lite standard work patterns is found in the SLCM Procedure. The Concept Exploration sub-phase is optional for Non-CPIC investments, when the work is not a new investment. The Requirements and Design sub-phases may be combined, as may the Testing and Implementation sub-phase/phase. However, all requirements must be completed in the manner laid out in the SLCM Procedure.

- **Project Level Reviews** – At the end of each sub-phase the project manager should conduct a review of the system to ensure that the requirements for that phase/sub-phase have been met. For Non-CPIC systems the project level reviews for the Requirements and Design sub-phases may be combined as well as the reviews for the Testing and Implementation sub-phases.

- **Control Gates** – For Majors and CPIC-Lite systems all four control gate reviews are required. The first at the end of the Requirements sub-phase, the second at the end of the Design sub-phase, the third at the end of the Testing sub-phase and the fourth during the Operations and Maintenance sub-phase. In this work pattern the system owner should ensure that all requirements have been met at each control gate before allowing the system to proceed to the next sub-phase. For Non-CPIC systems the first and second control gates may be combined into one that is conducted after Design.

References:
SYSTEM LIFE CYCLE MANAGEMENT (SLCM) PROCEDURE
http://www.epa.gov/irmpoli8/ciopolicy/SLCMProcedures-2111.5-p-1.pdf

OFFICE OF ENVIRONMENTAL INFORMATION POLICY
http://www.epa.gov/irmpoli8/policies.htm

APPENDIX: GLOSSARY

ACCEPTANCE/QUALIFICATION TESTING

Acceptance/qualification testing shall be required to check the system beha however these may have been expressed.

ADAPTIVE MAINTENANCE

Adaptive maintenance modifies the software to keep it up to date with its er and other systems all make up the environment of a software system. Adap because of changes in the target platform.

ADDED ITEM

Self-explanatory: a newly created ITEM; subtype of ITEM.

ALPHA AND BETA TESTING

Alpha and beta testing: Before the software is released, it may be required potential users for trial use, either in-house (alpha testing) or external (beta

CHANGE COSTS AND BENEFITS

The expected effort required to implement and the advantages (e.g. cost sa implementing the change. Also named economic feasibility (Vogl, 2004).

CHANGE IMPACT ANALYSIS

An assessment of the extent of the change (Rajlich, 1999).

CHANGE LOG ENTRY

Distinct entry in the collection of all changes (e.g. for a project); consists of TECHNICAL FEASIBILITY, CHANGE COSTS AND BENEFITS, CHANGE I PLANNING, TEST REPORT and CHANGE VERIFICATION. Not all these h terminated earlier (i.e. if the change is not implemented).

CHANGE PLANNING

"A scheme, method or design for the attainment of some objective or to ach (Georgetown University, n.d.), in this case the change.

CHANGE REQUEST

Document that describes the requested change and why it is important; car system enhancements, other projects, changes in underlying systems and s REQUIREMENTS (Dennis, et al., 2002). Important attribute: 'go/no-go deci executed or not?

CHANGE TECHNICAL FEASIBILITY

Concept that indicates whether or not "reliable hardware and software, tech needs of a proposed system [i.e. change request] can be acquired or devel time" (Vogl, 2004).

CHANGE VERIFICATION

A determination of whether or not the result of the change implementation f (Rigby, 2003).

CHANGED ITEM

Self-explanatory: an ITEM that already existed, but has been altered; subty

CONFIGURATION MANAGEMENT

Beyond documentation, configuration management shall include establishir controlling changes to the system. Change control shall ensure O&M perso undocumented changes to the system. A change control process shall be e proposed changes. A change may be as simple as changing a configuratio component. The change control process shall include all relevant stakehold system to ensure that all potential options and ramifications [including risk]

CONFIGURATION MANAGEMENT AUDITS

Configuration management audits – Audits conducted to confirm that config configuration items are complete, nt and accurate.

CONFIGURATION TESTING

Configuration testing: In cases v to analyze the software under th

it to serve different use ns.

CONFORMANCE TESTING/FUNCTIONAL TESTING/CORRECTNESS TESTING

Conformance testing/Function observed behavior of the test

nformance ations.

CORRECTIVE MAINTENANCE

Corrective maintenance rem

rriding priori

4

APPENDIX: GLOSSARY

CRITICAL CHANGE

Critical change: A change is considered critical if it has a major impact on ε maintenance budget. The criticality of a software change request is evaluat software problem.

DOCUMENTATION

According to the Pennsylvania State University Libraries (2004) definition, [which accompanies other materials (usually non-book), and which explains functions as a guide to the major materials." In this context, it can also be di as it relates to (pieces of) the system.

EMERGENCY RELEASE

Emergency release: The purpose of an emergency release is to get a mod as possible. Only the configuration items directly affected by the fault are re corrective.

FUNCTIONAL CONFIGURATION AUDITS (FCA)

Functional Configuration Audits (FCA) – Audits conducted to verify that the configuration item have achieved the requirements specified in its functiona operational and support documentation is complete and satisfactory.

IMPLEMENTATION PHASE

This phase of the EPA System Life Cycle is to move the completed system production environment and complete the necessary processes so users ca identified in the mission need.

INSTALLATION TESTING

Installation testing: Usually after completion of software and acceptance te: installation in the target environment.

INTEGRATION TESTING

Integration testing may be required to verify the interaction between softwaı software, systematic, incremental integration testing strategies are usually ɼ together at once.

ITEM

"A non-specific term used to denote any product, including systems, subsyɛ sets, accessories, computer programs, computer software or parts" (Rigby, ADDED ITEM and CHANGED ITEM.

MINOR RELEASE

Minor release: The purpose of a minor release is to provide corrections to ε minor releases depends upon the rate at which software problems are repo software problems. Some low-risk perfective maintenance changes may bε this SOW. A minor release of a software system may also provide small ext changes can be easily assimilated by users without training. Minor adaptivε maintenance process.

MODIFICATION / ENHANCEMENT

A type of development that makes changes to an existing system. Modificaı the following characteristics:

- Updates to a current system are necessary to fulfill an existing mission
- Several maintenance projects are combined to keep a legacy system e
- Minimal change or addition to a system's functional requirements (49%
- Work is of low to medium risk;
- Upgrades to existing technology are necessary; and/or
- Work requires a greater level of effort than *Maintenance.*
- Generally 4 to 12 months to implement (rule of thumb).

OPERATIONS AND MAINTENANCE PHASE

The operations and maintenance phase starts when the initiator, customer, software for production use. The phase ends when the software is taken ou executing activities such as operating the system, monitoring system perfor training operators, testing the system after any changes are made, and tuni

PERFECTIVE MAINTENANCE

Perfective maintenance improves the system without changing its functiona maintenance is preventing failures and optimizing the software. This might I components that have the highest failure rate, or components whose perfor

PERFORMANCE TESTING

Performance testing: This requirement is specifically aimed at verifying tha performance requirements, for instance, capacity and response time.

PHYSICAL CONFIGURATION AUDIT (PCA)

Physical Configuration Audit (PCA) – Audits conducted to verify that the as- technical documentation that defines it.

APPENDIX: GLOSSARY

PROBLEM REPORT

Document describing a problem that cannot be solved by a level 1 help des contact info of person reporting the problem, what is causing the problem, l action taken and disposition (Dennis, et al., 2002).

PROJECT HISTORY DOCUMENT (PHD)

A Project History Document (PHD) shall be required that summarizes the m project. The software manager should collect appropriate information, sumr by-phase as the project proceeds. When final acceptance is near, the softw document taking into account what has happened since the start of the ope

RECOVERY TESTING
REGRESSION TESTING

Recovery testing may be required to verify software restart capabilities afte Regression testing may be required to verify that modifications have not ca

REQUIREMENT

A required functionality of a component (or item; NASA, 2005).

SOFTWARE RELEASE MANAGEMENT

Software release management encompasses the identification, packaging, (e.g. executable program, documentation, release notes, and configuration which product items are to be delivered, and then select the correct variant application of the product. Refer to CMMI Product Integration for additiona

STRESS TESTING

Stress testing may be required to exercise software at the maximum design

SYSTEM RELEASE

Consists of one or more ITEMS and the accompanying DOCUMENTATION

SYSTEM TESTING

System testing may be required to test the behavior of a whole system and functional system requirements, such as security, speed, accuracy, and reli applications, utilities, hardware devices, or the operating environment are a

TEST REPORT

"A document that describes the conduct and results of the testing carried o the change]" (IEEE, 1991).

UNIT TESTING

Unit testing may be required to verify the functioning in isolation of software Depending on the context, these could be the individual subprograms or a l units. Typically, unit testing occurs with access to the code being tested an might involve the programmers who wrote the code.

URGENT CHANGE

Urgent change: A change is urgent if it has to be implemented and release Routine changes are released in convenient groups according to the releas management plan.

USABILITY TESTING

Usability testing may be required to evaluate how easy it is for end-users to user documentation; how effectively the software functions in supporting us from user errors.

SES3 (*insert vendor name*) Contractor S

Last Name	First Name	Task Order #	TDD#	EPA Technical Monitor	Location	Govt Site or Vendor Site	AAA Token Serial #**

* Insert N/A if not applicable
** Identify which or N/A if neither

Staff as of XXXX (insert date)

EPA Lotus Notes - ID and/or Email**	EPA Issued Computer - Yes/No	EPA Computer Decal #	EPA Badge #*	Notes

ORD Location	L/C/O	Application Name	Technology
Ada	NRMRL	Ada Comp Support	Lotus Notes
Ada	NRMRL	Ada Technical Directives	Lotus Notes
Ada	NRMRL	Auto Identification	Lotus Notes
Ada	NRMRL	Borehole Flowmeter	C
Ada	NRMRL	Chemical Inventory	Oracle Forms 6i
Ada	NRMRL	Credit Hours	Lotus Notes
Ada	NRMRL	CSMoS Model Library	Lotus Notes
Ada	NRMRL	Extramural Database	Lotus Approach
Ada	NRMRL	GWERD Document Deliverable Library	Lotus Notes
Ada	NRMRL	GWERD EMS Training	Lotus Notes
Ada	NRMRL	GWERD Graphics Deliverable Library	Lotus Notes
Ada	NRMRL	GWERD Handbook	Lotus Notes
Ada	NRMRL	GWERD Message Box	Lotus Notes
Ada	NRMRL	GWERD Training	Lotus Notes
Ada	NRMRL	Health and Safety System	Microsoft Access
Ada	NRMRL	IHRP	Cold Fusion
Ada	NRMRL	Laptop Updates	Lotus Notes
Ada	NRMRL	Ledger Database	Microsoft Access
Ada	NRMRL	Locator Database	Cold Fusion
Ada	NRMRL	Oracle Server Status	Lotus Notes
Ada	NRMRL	PC Inventory	Oracle Forms 6i
Ada	NRMRL	Property Management	Oracle Forms 6i
Ada	NRMRL	QA Apps	Lotus Notes
Ada	NRMRL	QLOG	Lotus Notes
Ada	NRMRL	Reservations System	Lotus Notes
Ada	NRMRL	RSKERL Computer Procedures	Lotus Notes
Ada	NRMRL	Safety Management	Oracle Forms 6i
Ada	NRMRL	Sr. Management Team Room	Lotus Notes
Ada	NRMRL	Serials Info System	Oracle Forms 6i
Ada	NRMRL	SRIC	Oracle Forms 6i
Ada	NRMRL	Supply Management	Oracle Forms 6i
Ada	NRMRL	Travel Database	Microsoft Access
Ada	NRMRL	Valco Switches	C
Athens	NERL	ACT Barriers and Suggestions	Lotus Notes
Athens	NERL	Athens Awards Database System	Lotus Notes
Athens	NERL	Athens Beach Study Mail-in Database	Lotus Notes
Athens	NERL	Athens Configuration Recommendations	Lotus Notes
Athens	NERL	Athens Disuser Log	Lotus Notes
Athens	NERL	Athens Inhouse Property System	Lotus Notes
Athens	NERL	Athens Library Check Out/In Sys	Lotus Notes
Athens	NERL	Athens Purchase Order System	Lotus Notes
Athens	NERL	CFE Software Database	Lotus Notes
Athens	NERL	Control Items System	Lotus Notes
Athens	NERL	Definitive Media Library	Lotus Notes
Athens	NERL	ERD - IT - SOPs	
Athens	NERL	ERD Admin Suite	
Athens	NERL	ERD LabNotes	
Athens	NERL	ERD Policies and Procedures - LOPS	
Athens	NERL	ERD Software Database	L
Athens	NERL	ERD Web Awards	L
Athens	NERL	Facilities Helpdesk DB	L

Athens	NERL	Facilities Management System	Lotus Notes
Athens	NERL	Laboratory Corrective Action Tracking System	Lotus Notes
Athens	NERL	Name Change or Rebuild	Lotus Notes
Athens	NERL	Proteus	COTS
Athens	NERL	Scientific Research Plan (SRP InfoPath)	Microsoft Access/Info Path
Athens	NERL	Telecom HelpDesk\Telephone WRS	Lotus Notes
Athens	NERL	Work Request	Lotus Notes
Cincinnati	NERL	BugBase	PHP
Cincinnati	NERL	CERB Log Book	Lotus Notes
Cincinnati	NERL	ETV Web Site Log	Lotus Notes
Cincinnati	NERL	IACUC Protocols	Lotus Notes
Cincinnati	NERL	NERL CI Wired	Lotus Notes
Cincinnati	NERL	Provisional Peer Review Toxicicity Values	PHP
Cincinnati	NERL	Workstation/Account Request	Lotus Notes
Cincinnati	NERL	Thermalcycler Reservation Database	Lotus Notes
Cincinnati	NERL	Vehicle Reservation Database	Lotus Notes
RTP	NERL/NCCT	NERL/NCCT QATS v2.1	Lotus Notes
RTP	NERL/NCCT	NERL/NCCT SOP v2.1	Lotus Notes
Cincinnati	NHSRC	NHSRC QA Track	Lotus Notes
Cincinnati	NHSRC	PPRTV	PHP
Corvallis	NHEERL	Budget Application	Microsoft Access
Corvallis	NHEERL	Cardlock System	COTS
Corvallis	NHEERL	Chemical Inventory Database	Lotus Notes
Corvallis	NHEERL	Infor 7i BE	COTS
Corvallis	NHEERL	Library Work Request	Lotus Notes
Corvallis	NHEERL	Quality Assurance Database	Microsoft Access
Corvallis	NHEERL	Records Archive Database	Lotus Notes
Corvallis	NHEERL	Training Database	Lotus Notes
Corvallis	NHEERL	WED Travel Calendar Database	Lotus Notes
Corvallis	NHEERL	Who What Where	Microsoft Access
Corvallis	NHEERL	Write-2	Microsoft Access
Duluth	NHEERL	Application Administrators Tool	Cold Fusion
Duluth	NHEERL	ArcGIS (database only)	Oracle Database
Duluth	NHEERL	CATS	Oracle Forms 6i
Duluth	NHEERL	Event Registration System	Cold Fusion
Duluth	NHEERL	MED Room Calendar	Lotus Notes
Duluth	NHEERL	Qwest Yellow Pages	COTS
Duluth	NHEERL	Recruiting Contacts Database	Lotus Notes
Duluth	NHEERL	Research Summary	Cold Fusion
Duluth	NHEERL	Research Vessel Survey	Lotus Notes
Duluth	NHEERL	Staff	Cold Fusion
Duluth	NHEERL	Technical Assistance Information System (TAIS)	Cold Fusion
Duluth	NHEERL	TERS Reqeust System	Cold Fusion
Duluth	NHEERL	Training Resources	Cold Fusion
Duluth	NHEERL	Vertere	COTS
Gulf Breeze	NHEERL	Address Book Review	Lotus Notes
Gulf Breeze	NHEERL	Chemical Inventory	Lotus Notes
Gulf Breeze	NHEERL	Chiller_Data_45	Lotus Notes
Gulf Breeze	NHEERL	Compliance	Lotus Notes
Gulf Breeze	NHEERL	Contractor Procurements	Lotus Notes
Gulf Breeze	NHEERL	Diving_Records	Lotus Notes
Gulf Breeze	NHEERL	Doors	Lotus Notes

Gulf Breeze	NHEERL	E~Forms Agent Container	Lotus Notes
Gulf Breeze	NHEERL	Employee Processing	Lotus Notes
Gulf Breeze	NHEERL	Environmental Management System	Lotus Notes
Gulf Breeze	NHEERL	Equipment_Maintenance_System	Lotus Notes
Gulf Breeze	NHEERL	Facilities Daily Time	Lotus Notes
Gulf Breeze	NHEERL	Facilities_Work_Requests	Lotus Notes
Gulf Breeze	NHEERL	FedEx	Lotus Notes
Gulf Breeze	NHEERL	Float Plans	Lotus Notes
Gulf Breeze	NHEERL	Gas Acquisition System	Lotus Notes
Gulf Breeze	NHEERL	GB Facilitis	Lotus Notes
Gulf Breeze	NHEERL	GED - Acute Toxicity Data	Lotus Notes
Gulf Breeze	NHEERL	GED - ADP Daily Time	Lotus Notes
Gulf Breeze	NHEERL	GED - ADP Maintenance System	Lotus Notes
Gulf Breeze	NHEERL	GED - ADP Property	Lotus Notes
Gulf Breeze	NHEERL	GED - ADP_Work_Requests	Lotus Notes
Gulf Breeze	NHEERL	GED - Animal Use	Lotus Notes
Gulf Breeze	NHEERL	GED - Archive Lotus Notes Databases	Lotus Notes
Gulf Breeze	NHEERL	GED - Author Index	Lotus Notes
Gulf Breeze	NHEERL	GED - Authorized Visitor	Lotus Notes
Gulf Breeze	NHEERL	GED - Award Nominations	Lotus Notes
Gulf Breeze	NHEERL	GED - Benthic Data	Lotus Notes
Gulf Breeze	NHEERL	GED - Call Detail	Lotus Notes
Gulf Breeze	NHEERL	GED - Employee Timesheet Database	Lotus Notes
Gulf Breeze	NHEERL	GED - Environmental Bibliography	Lotus Notes
Gulf Breeze	NHEERL	GED - Frequently Asked Questions	Lotus Notes
Gulf Breeze	NHEERL	GED - Fresh Water Toxicity Data	Lotus Notes
Gulf Breeze	NHEERL	GED - Human Resources Database	Lotus Notes
Gulf Breeze	NHEERL	GED - ILL_Requests	Lotus Notes
Gulf Breeze	NHEERL	GED - Interlibrary Loan Data	Lotus Notes
Gulf Breeze	NHEERL	GED - Laboratory Contributions	Lotus Notes
Gulf Breeze	NHEERL	GED - Laboratory Notebooks	Lotus Notes
Gulf Breeze	NHEERL	GED - Library Holdings	Lotus Notes
Gulf Breeze	NHEERL	GED - Library Orders Data Base	Lotus Notes
Gulf Breeze	NHEERL	GED - Library Orders Data Base	Lotus Notes
Gulf Breeze	NHEERL	GED - Library Reprints	Lotus Notes
Gulf Breeze	NHEERL	GED - Literature Search Requests	Lotus Notes
Gulf Breeze	NHEERL	GED - Lotus Notes Agent/Functions	Lotus Notes
Gulf Breeze	NHEERL	GED - Lotus Notes Agent/Functions	Lotus Notes
Gulf Breeze	NHEERL	GED - NADS Image Database	Lotus Notes
Gulf Breeze	NHEERL	GED - NARA Disposition	Lotus Notes
Gulf Breeze	NHEERL	GED - Non ADP Property	Lotus Notes
Gulf Breeze	NHEERL	GED - Phone	Lotus Notes
Gulf Breeze	NHEERL	GED - Policies and Procedures	Lotus Notes
Gulf Breeze	NHEERL	GED - Probit Analysis Database	Lotus Notes
Gulf Breeze	NHEERL	GED - Probit Analysis Database	Lotus Notes
Gulf Breeze	NHEERL	GED - Procurement Request Status	Lotus Notes
Gulf Breeze	NHEERL	GED - QA Project Plans	Lotus Notes
Gulf Breeze	NHEERL	GED - Receiving Reports	Lotus Notes
Gulf Breeze	NHEERL	GED - Research Planning	Lotus Notes
Gulf Breeze	NHEERL	GED - Reservations	Lotus Notes
Gulf Breeze	NHEERL	GED - Seawater Delivery System Data	Lotus Notes
Gulf Breeze	NHEERL	GED - Seawater QA Monitoring	Lotus Notes

Gulf Breeze	NHEERL	GED - Spearman-Karber Analysis	Lotus Notes
Gulf Breeze	NHEERL	GED - Standard Toxicity Data	Lotus Notes
Gulf Breeze	NHEERL	GED - Suggestion Box	Lotus Notes
Gulf Breeze	NHEERL	GED - Tosics Release Inventory	Lotus Notes
Gulf Breeze	NHEERL	GED - Travel_Request	Lotus Notes
Gulf Breeze	NHEERL	GED - Vendor Database	Lotus Notes
Gulf Breeze	NHEERL	GED - Visual Products Catalog	Lotus Notes
Gulf Breeze	NHEERL	GED - Warehouse Supplies	Lotus Notes
Gulf Breeze	NHEERL	GED - Weather Data	Lotus Notes
Gulf Breeze	NHEERL	GED - WEB	Lotus Notes
Gulf Breeze	NHEERL	GED - Week at a Glance Newsletter	Lotus Notes
Gulf Breeze	NHEERL	GED - Wet Lab Data	Lotus Notes
Gulf Breeze	NHEERL	GED Call detail	Lotus Notes
Gulf Breeze	NHEERL	GED Facilities Daily Time	Lotus Notes
Gulf Breeze	NHEERL	GED Laboratory Research Products Catalog	Lotus Notes
Gulf Breeze	NHEERL	IT Systems Inventory	Lotus Notes
Gulf Breeze	NHEERL	Receiving Reports	Lotus Notes
Gulf Breeze	NHEERL	Reminder	Lotus Notes
Gulf Breeze	NHEERL	Security Requests	Lotus Notes
Gulf Breeze	NHEERL	Web ICE	Lotus Notes
Las Vegas	NERL	ADP Request Tracking	Lotus Notes
Las Vegas	NERL	API Mail Interface	Lotus Notes
Las Vegas	NERL	Appstart	Visual Basic 6
Las Vegas	NERL	Chemical Inventory	Lotus Notes
Las Vegas	NERL	Contract Accounting	Lotus Notes
Las Vegas	NERL	EDS Phase One	Lotus Notes
Las Vegas	NERL	Encrypt	Visual Basic 6
Las Vegas	NERL	ESD Resource Reservations	Lotus Notes
Las Vegas	NERL	Facilities Request End User Interface	Lotus Notes
Las Vegas	NERL	Facilities Request Tracking System	Lotus Notes
Las Vegas	NERL	Facility Key Tracking	Lotus Notes
Las Vegas	NERL	Fast HAP	Visual Basic 6
Las Vegas	NERL	Field Update Manager	Lotus Notes
Las Vegas	NERL	Gas Cylinder Tracking	Visual Basic 6
Las Vegas	NERL	GCT Reporter	Visual Basic 6
Las Vegas	NERL	History of Accountable Property (HAP)	Visual Basic 6
Las Vegas	NERL	IAMS Buildings and Rooms	Lotus Notes
Las Vegas	NERL	IAMS Employees	Lotus Notes
Las Vegas	NERL	IAMS Employers	Lotus Notes
Las Vegas	NERL	IAMS External Services	Lotus Notes
Las Vegas	NERL	IAMS Internal Services	Lotus Notes
Las Vegas	NERL	IAMS Library	Visual Basic 6
Las Vegas	NERL	IAMS Organizational Paths	Lotus Notes
Las Vegas	NERL	Imagery Report Locator	Lotus Notes
Las Vegas	NERL	Performance Award System	Lotus Notes
Las Vegas	NERL	pH Monitor	Visual Basic 6
Las Vegas	NERL	pH Reporter	Visual Basic 6
Las Vegas	NERL	Phone Book	Crystal Reports
Las Vegas	NERL	Phone Viewer	Lotus Notes
Las Vegas	NERL	Procurement Request/Order System (PRO)	Visual Basic .NET
Las Vegas	NERL	Recurring Costs Tracking System	Lotus Notes
Las Vegas	NERL	Regit	Visual Basic 6

Las Vegas	NERL	Rolodex	Visual Basic 6
Las Vegas	NERL	Software Dictionary	Visual Basic 6
Las Vegas	NERL	Software Inventory Control	Visual Basic 6
Las Vegas	NERL	Software Summaries	Visual Basic 6
Las Vegas	NERL	Software Transfers	Visual Basic 6
Las Vegas	NERL	Warehouse Inventory Control (WIC)	Visual Basic 6
Las Vegas	NERL	Warehouse On-Line Ordering System (WareCat)	Lotus Notes
Narragansett	NHEERL	Administration Leave Calendar	Lotus Notes
Narragansett	NHEERL	AED Wildlife Literature Database	PL/SQL
Narragansett	NHEERL	E-Forms	Lotus Notes
Narragansett	NHEERL	Facilities Work Request	PL/SQL
Narragansett	NHEERL	Admin Suite	Lotus Notes
Narragansett	NHEERL	Hardware Inventory System	PL/SQL
Narragansett	NHEERL	Library AED Bibliography System	PL/SQL
Narragansett	NHEERL	NEERS Membership System	Microsoft Access
Narragansett	NHEERL	Photo Archive System	PL/SQL
Narragansett	NHEERL	Procurement Database	PL/SQL
Narragansett	NHEERL	Publication Tracking System	Unknown
Narragansett	NHEERL	QA Tracking System	PL/SQL
Narragansett	NHEERL	Records/Archive System	PL/SQL
Narragansett	NHEERL	Resource Reservation	Lotus Notes
ORD Wide	ORD Wide	ORD BioSketch	Lotus Notes
ORD Wide	ORD Wide	Environmental Science Connector	Oracle Portal / Java
ORD Wide	ORD Wide	Mail-In Database	Lotus Notes
ORD Wide	ORD Wide	OMIS	Oracle Forms 6i
ORD Wide	ORD Wide	ORMA RRB Resources	Lotus Notes
ORD Wide	ORD Wide	ORD Address Book	Lotus Notes
ORD Wide	ORD Wide	ORD Awards Database	Lotus Notes
ORD Wide	ORD Wide	ORD Change Control Database	Lotus Notes
ORD Wide	ORD Wide	ORD Transmittal	Lotus Notes
ORD Wide	ORD Wide	ORD@Work	Java
ORD Wide	ORD Wide	OSP Crada Database	Lotus Notes
ORD Wide	ORD Wide	ROCS Account Services Database	Lotus Notes
ORD Wide	ORD Wide	Science Inventory	Cold Fusion
ORD Wide	ORD Wide	Water Treatability Database	Java
RTP	NCCT	NCCT Web Stats	Cold Fusion
RTP	NCEA	NCEA CRIB	Cold Fusion
RTP	NCEA	NCEA Docket	Cold Fusion
RTP	NCEA	NCEA TRCTrack	PowerBuilder
RTP	NCEA	Software Reservations Database	Lotus Notes
RTP	ORD Wide	c.Support	Lotus Notes
RTP	NERL	NERL Competitive Sourcing Survey	Lotus Notes
RTP	NERL	HEASD Log	Lotus Notes
RTP	NERL	Identity Reconciliation Database	Lotus Notes
RTP	NERL	ORMA Action Transmittals	Lotus Notes
RTP	NERL	Purchase Card- NERL	Lotus Notes
RTP	NERL	TIS	Lotus Notes
RTP	NERL	WebTracker Mach II	Lotus Notes
RTP	NERL	WIPS	Lotus Notes
RTP	NHEERL	Analytical Chemistry Core	Cold Fusion
RTP	NHEERL	Animal Requests Database	Lotus Notes
RTP	NHEERL	Awards Registration	Cold Fusion

RTP	NHEERL	Bank Card	Lotus Notes
RTP	NHEERL	Beaches	Lotus Notes
RTP	NHEERL	Client Contract Survey	Lotus Notes
RTP	NHEERL	ECD Citations	Cold Fusion
RTP	NHEERL	ECD Intranet	Cold Fusion
RTP	NHEERL	NHEERL Competitive Sourcing Survey	Lotus Notes
RTP	NHEERL	eLAPR	Lotus Notes
RTP	NHEERL	Extramural Tracking System	Lotus Notes
RTP	NHEERL	GAS	Lotus Notes
RTP	NHEERL	Intranet Search	Cold Fusion
RTP	NHEERL	Media Archive	Cold Fusion
RTP	NHEERL	Networking Leadership and Training	Cold Fusion
RTP	NHEERL	NHEERL Calendar.	Cold Fusion
RTP	NHEERL	NHEERL CF	Cold Fusion
RTP	NHEERL	NHEERL Fact Sheets	Cold Fusion
RTP	NHEERL	NHEERL Health Division Sounding Boards	Cold Fusion
RTP	NHEERL	NHEERL Staffing Survey	Cold Fusion
RTP	NHEERL	QAIMS	Lotus Notes
RTP	NHEERL	Regulatory Support Database	Lotus Notes
RTP	NHEERL	RPCS Team Room	Lotus Notes
RTP	NHEERL	Toxicogenomics Core	Cold Fusion
RTP	ORD Wide	OSA Staff Calendar	Lotus Notes